

Remarks

Claims 1-27 are now pending in this application. Applicant has amended claim 1 to clarify the claimed invention. Claims 15-27 are withdrawn from consideration by the Examiner as directed to non-elected inventions. Applicants respectfully request favorable reconsideration of this case.

Applicant has amended claim 1 to clarify the that at least one lead is fixed to the pre-solder by soldering with another solder. Soldering of the lead is not part of the pre-soldering that prepares the capacitor element for the lead to be soldered thereto. Accordingly, Applicant submits that claim 1 complies with 35 U.S.C. § 112, second paragraph and respectfully requests withdrawal of this rejection.

The Examiner rejected claims 1-6 under 35 U.S.C. § 103(a) as being unpatentable over the prior art discussed in the specification (Applicant's Admitted Prior Art or AAPA) in view of U.S. patent 1,425,633 to Colby. The Examiner rejected claims 9-11 under 35 U.S.C. § 103(a) as being unpatentable over AAPA and Colby and further in view of U.S. patent 3,480,759 to Sachs et al. The Examiner rejected claims 12-14 under 35 U.S.C. § 103(a) as being unpatentable over AAPA and Colby and further in view of EP 1 112 803 to Tadauchi et al.

The combination of AAPA and Colby does not suggest the invention recited in claims 1-6 since, among other things, the combination does not suggest an automated method for pre-soldering at least one end surface of a capacitor element that includes coating a solder tip with

pre-solder in the solder pot, bringing the coated solder tip into contact with at least one end surface of the capacitor element, moving the solder tip along the at least one end surface of the capacitor element, and ceasing the contact between the solder tip and the at least one end surface of the capacitor element. The combination also does not suggest fixing at least one lead to the pre-solder by soldering the at least one lead to the pre-solder on the at least one end surface of the capacitor element with another solder.

The two step method according to the claimed invention helps to prevent solder tips from becoming oxidized when used with pre-solder. Thus, the claimed invention provides a solution to the problem of oxidation of solder tips by heating the solder tip in pre-heated pre-solder. The coating of the solder tip with solder without any operator action makes possible the automated pre-soldering. Neither AAPA nor Colby suggests the automated solder coating or pre-soldering. Actually, the paragraph bridging pages 2 and 3 of the specification clearly describes how known methods require operator intervention.

Additionally, Colby suggests an electrically heated solder pot and an adjustable means for holding a soldering iron in heat receiving relation in the solder pot. Colby does not suggest a process for soldering. In particular, Colby does not suggest pre-soldering an end surface of a capacitor element.

Furthermore, Colby also does not suggest a two-step soldering process that includes coating an end surface of the capacitor with a preheated pre-solder and fixing at least one lead to the pre-solder by soldering the at least one lead to the pre-solder with a second solder. Rather,

Colby suggests an electrically heated solder pot comprising an adjustable means for holding a soldering iron to be used for manual soldering. As shown in Fig. 1, Colby only suggests manual soldering utilizing a soldering iron.

In view of the above, it would not be obvious to one of ordinary skill in the art to combine AAPA and Colby since Colby does not suggest that the electrically heated solder pot and the adjustable means for holding a soldering iron could be used for a method of pre-soldering an end of a capacitor element and solve the problem of how to provide an automated pre-soldering process.

In view of the above, the combination of AAPA and Colby does not suggest the invention recited in claims 1-6. Therefore, the combination of AAPA and Colby does not make the invention recited in claims 1-6 obvious. Accordingly, Applicant respectfully requests withdrawal of this rejection.

The combination of AAPA, Colby and Sachs et al. does not suggest the invention recited in claims 9-11 since, among other things, Sachs et al. does not overcome the above-described deficiencies of AAPA and Colby. For example, Sachs et al. also does not suggest an automated method for pre-soldering at least one end surface of a capacitor element that includes coating a solder tip with pre-solder in the solder pot, bringing the coated solder tip into contact with at least one end surface of the capacitor element, moving the solder tip along the at least one end surface of the capacitor element, and ceasing the contact between the solder tip and the at least one end surface of the capacitor element. Sachs et al. also does not suggest fixing at least one

lead to the pre-solder by soldering the at least one lead to the pre-solder on the at least one end surface of the capacitor element with another solder. The Examiner cites Sachs et al. as suggesting a rotating solder tip. A rotating solder tip does not suggest the above-discussed aspects of the invention not suggested by AAPA and Colby.

Therefore, the combination of AAPA, Colby and Sachs et al. does not suggest the invention recited in claims 9-11. Accordingly, the combination of AAPA, Colby and Sachs et al. does not make the invention recited in claims 9-11 obvious. Consequently, Applicant respectfully requests withdrawal of this rejection.

The combination of AAPA, Colby and Tadauchi et al. does not suggest the invention recited in claims 12-14 since, among other things, Tadauchi et al. does not overcome the above-described deficiencies of AAPA and Colby. For example, Tadauchi et al. also does not suggest an automated method for pre-soldering at least one end surface of a capacitor element that includes coating a solder tip with pre-solder in the solder pot, bringing the coated solder tip into contact with at least one end surface of the capacitor element, moving the solder tip along the at least one end surface of the capacitor element, and ceasing the contact between the solder tip and the at least one end surface of the capacitor element. Tadauchi et al. also does not suggest fixing at least one lead to the pre-solder by soldering the at least one lead to the pre-solder on the at least one end surface of the capacitor element with another solder. The Examiner cites Tadauchi et al. as suggesting solder having a melting point of 300-400°C. Solder having a melting point of 300-400°C does not suggest the above-discussed aspects of the invention not suggested by AAPA and Colby.

Accordingly, the combination of AAPA, Colby and Tadauchi et al. does not suggest the invention recited in claims 12-14. As a result, the combination of AAPA, Colby and Tadauchi et al. does not make the invention recited in claims 9-11 obvious. Therefore, Applicant respectfully requests withdrawal of this rejection.

In view of the above, the references relied upon in the office action do not suggest patentable features of the claimed invention. Therefore, the references relied upon in the office action do not make the claimed invention obvious. Accordingly, Applicant respectfully requests withdrawal of the rejections based upon the cited references.

In conclusion, Applicant respectfully requests favorable reconsideration of this case and early issuance of the Notice of Allowance.

If an interview would advance the prosecution of this application, Applicant respectfully urges the Examiner to contact the undersigned at the telephone number listed below.

The undersigned authorizes the Commissioner to charge fee insufficiency and credit overpayment associated with this communication to Deposit Account No. 22-0261.

Respectfully submitted,

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